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This study was conducted to evaluate the impact of dietary behaviors, specifically fruit and vegetable consumption, on outcomes of prostate cancer (PC) among a random sample of African American (AA) men. The goal was to determine how fruit and vegetable behavior might enhance treatment outcomes and the quality of life among AA men. Currently it is unknown how culturally-specific dietary behaviors impact treatment outcomes for PC for AAs. The parent study was a four-year study, conducted through black churches located in Atlanta, GA, and maintained two specific aims: 1) to develop a multicomponent, culturally-sensitive nutrition intervention package (Tx) for AAs, and 2) to evaluate the feasibility and efficacy of the intervention. primary outcome variables for the study which included servings of fruit and vegetables (F & V), total fat and fiber intake, serum cholesterol and serum carotenoids. Given the small number of men who reported a history of being treated for PC (n = 2), we were not able to test the mediation impact of dietary practice on PC outcomes. However, as anticipated, those men who reported being treated for PC tended to be older, and to maintain lower blood pressure and levels of cholesterol. We were able to evaluate a profile of those men who were likely to get screened for PC compared to those who were not. Participants who had been screened for PC were approximately 12 years older, had a somewhat higher systolic blood pressure, level of cholesterol and body mass index (BMI). Fifty percent (50.6%) of respondents reported ever being screened for PC (Table 1). Of those reporting being screened for PC, 64.0% indicated having a PSA compared to 51.3% for those that had a DRE conducted.

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Abstract

This study was conducted to evaluate the impact of dietary behaviors, specifically fruit and vegetable consumption, on outcomes of prostate cancer (PC) among a random sample of African American (AA) men. The goal was to determine how fruit and vegetable behavior might enhance treatment outcomes and the quality of life among AA men. Currently it is unknown how culturally-specific dietary behaviors impact treatment outcomes for PC for AAs. The parent study was a four-year study, conducted through black churches located in Atlanta, GA, and maintained two specific aims: 1) to develop a multicomponent, culturally-sensitive nutrition intervention package (Tx) for AAs, and 2) to evaluate the feasibility and efficacy of the intervention. primary outcome variables for the study which included servings of fruit and vegetables (F & V), total fat and fiber intake, serum cholesterol and serum carotenoids. Given the small number of men who reported a history of being treated for PC (n = 2), we were not able to test the mediation impact of dietary practice on PC outcomes. However, as anticipated, those men who reported being treated for PC tended to be older, and to maintain lower blood pressure and levels of cholesterol. We were able to evaluate a profile of those men who were likely to get screened for PC compared to those who were not. Participants who had been screened for PC were approximately 12 years older, had a somewhat higher systolic blood pressure, level of cholesterol and body mass index (BMI). Fifty percent (50.6%) of respondents reported ever being screened for PC (Table 1). Of those reporting being screened for PC, 64.0% indicated having a PSA compared to 51.3% for those that had a DRE conducted.

Introduction

The goal of this study was to investigate how patterns of fruit and vegetable consumption enhance or reduce one's quality of life after being treated for prostate cancer (PC). Using the random design of the parent study, we propose to: (a) significantly involve African American (AA) males in the Atlanta metropolitan area in a study evaluating outcomes of PC, (b) to gather data to develop a model describing the relationship between dietary behavior and outcomes to PC, and (c) to describe how these differences, if any, exist cross-sectionally based on co-morbidity.

Our broad objective is to identify factors or combinations of factors that appear to be responsible for the excess risk of mortality due to PC in AAs after being treated for PC. Conceptual elements for the proposed study will be gathered via focus groups, medical records, and biological and survey/interview data. The information collected from this study will be used to develop an instructional tool (multi-media or curriculum) for improving quality of life and enhancing compliance to prostate cancer regimen. The developed intervention will be designed to increase and monitor specific information and practices that research suggests will reduce prostate cancer mortality and as supplemented via the findings of the study.

We proposed to conduct preliminary work for a planned case-control study that will investigate the relationship between fruit and vegetable intake and outcomes to PC among AA men. Using secondary data collected from selected male participants regarding dietary behavior and cancer co-morbidity self reported information, we desired to evaluate how dietary behavior differed with respect to one's past history of being treated for PC.

Background

Adenocarcinoma of the prostate is one of the leading causes of death among men in the US. [1,2] It has been articulated as the second leading cause of cancer-related mortality, accounting for more than 20% of all cancers exhibited in men.[3] As a population, AAs tend to have the highest age-adjusted cancer morbidity and mortality rates than any other ethnic group in the United States and evince the highest rates of PC in the world [4]. African American men in the southeastern US are particularly at risk.[5-8] Moreover, AAs at the time of diagnosis tend to be younger and have a higher-stage disease. [9-11]

These excessive risks for AA males are independent of social class.[12] What is clear is that AA mortality from PC remains the highest of any population in the world. Incidence rates for AA men have increased steadily since the 1950s[13] with AA men having an 85% greater chance of being diagnosed with PC and a 114% increased chance of dying from it when compared to white American men.[13,14] As a result, the diagnosis of PC is of considerable importance among AA men.

Methods

The study occurred within the context of a larger study [Eat For Life (EFL)] that examined the effectiveness of a dietary behavioral change intervention among AA in a major southeastern city. The study is a randomized cluster intervention effectiveness trial with one control and two experimental conditions. Participating churches were recruited through local community members and randomly assigned to one of three conditions. All churches were matched with respect to socioeconomic status (low, mixed, or high) and size. Four, five and four churches were assigned to conditions 1 through 3 respectively. All data for the baseline and one-year follow-up were obtained at health fairs conducted at each church.

For this substudy, five of the 13 churches were previously randomly selected to provide secondary data regarding PC screening and co-morbidity information. Participants completed the paper-based questionnaire prior to their participation in a health fair conducted at their church. The questionnaire was comprised of ten items and queried participants on screening practices, perceived risk for PC, and knowledge of friends or family affected by PC. Respondents rated their likelihood for developing PC based upon a scale ranging from (1) *not at all likely* to (10) *extremely likely.*

Descriptive analyses were conducted to provide a summary of demographic, dietary practices and PC treatment and screening outcomes. The primary statistical analyses were the comparison of means (t-Test) and linear associations (Chi-Square), with screening and PC outcomes as dependent variables.

Results

Sample Characteristics

Prostate cancer information was collected from 82 men attending AA churches. Of those men from which PC information had been collected, 67% (n=56) were original participants of the larger study. The mean age of the sample was 44.6 (14.0) years. Twenty percent (n=10) reported a yearly income of $19,000 or less; 34% (n=17) $20,000-39,999; 18% (n=9) $40,000-59,999; and 28% (n=14) indicated a yearly income of $60,000 or greater. Over sixty percent (66.1%, n=36) of respondents were married. Approximately twenty percent (19.6%, n=11) were single, and 14.3% (n=8) were divorced or separated. Eleven percent (11.35, n=6) did not complete high school compared to 42.2% (n=35) who graduated from high school, and 22.2% (n= 12) who completed college.

Screening Practices

Fifty percent (50.6%) of respondents reported ever being screened for PC (see Table 1 in appendix). Of those screened for PC, 64.0% indicated having a PSA, compared to 51.3% that had a DRE conducted. Nearly 30% knew someone who had been diagnosed with PC. Four of these respondents indicated that they had been treated for PC. Three of the men were matched to the larger EFL data set. Each attended different churches. However, the most complete dietary information was available for only one of these men.

Physiological and Dietary Profiles

Table 1 presents age and other physiological measures of the men in the EFL and PC study and PC cases. The mean age of those men that reported being treated for PC was 62, compared to 43 for those in the EFL, and 44 for the men in the PC study. Overall, the PC cases had lower mean systolic and diastolic blood pressures, cholesterol, and body mass index (BMI). Similar means for these variables were expected between the PC and EFL study sample, since they were derived from the same study population. There were significant differences in age [$t(55)= 4.23$, $p<.001$] and BMI [$t(50)=2.06$, $p<.05$] between those men screened for PC and those not screened for PC. Men screened for PC tended to be older and had a lower BMI (Table 2). The PC cases also appeared to have higher alpha-tocopherol, gamma-tocopherol and lycopene levels than those men in the larger EFL study and PC study.

Key Research Accomplishments

Major research accomplishments for this study were two-fold. The principal investigator (PI) presented findings of this study to a group of Atlanta-based urologists affiliated with the Atlanta Urological Consultants group. In addition, findings are currently being submitted for publication in the Annals of Behavioral Medicine.

The PI is also in the process of completing two grants that include the findings of the U.S. Army-funded effort as a preliminary study. The first grant (Enhancing Quality of Life for AA Men After Treatment for Prostate Cancer) will be submitted to the National Cancer Institute for the March 2000 funding period. The second grant (Dietary Intervention to Improve Cancer Free Survival Among AA Men) will be submitted to the American Cancer Society (ACS) in June. Dr. Stephens is currently the Co-PI of a study submitted this past September to the ACS. The study involves the development of a culturally-sensitive PC screening video for AA men and will be conducted in barbershops in metropolitan Atlanta.

In summary, the PI has used the information from this study to pursue additional funding for health behavior research and interventions designed for AA, in particular AA men.

Reportable Outcomes

A manuscript as follows:

T. Stephens, Ph.D; J.Lubin; K. Resnicow, Ph.D.; R. Braithwaite, Ph.D. *A Description of Prostate Cancer Screening Practices Among African American Men* (submitted to the Annals of Behavioral Medicine).

Conclusions

The aim of this study was to evaluate and measure, if any, the mediation effect of selected study behaviors on fruit and vegetable intake behavior of AA men who had been treated for PC. However, due to the small number of participants reporting a history of past treatment for PC, we were unable to evaluate this outcome. Data was available to develop a dietary behavior profile of the male participants based on prior treatment for PC, prior screening for PC, and not ever being screened for PC (see Appendix 1). Data were amenable to analysis with respect to demographic attributes of sample (gender, race, age, etc.).

Although we were not able to evaluate how dietary behavior impacts outcomes of PC, we were able to evaluate some valuable data regarding PC screening practices and participants' perceived risk to PC. Although perceived risk for PC was not related to screening status, knowledge of friends or family diagnosed or treated with PC appears to increase screening participation. Personal knowledge of someone affected with PC may increase susceptibility to developing PC, thus prompting men to be screened for the disease. Given the mean age (44.6) of the sample and the percentage (50.5%) of men screened for PC, it appears that the majority of the men sampled were aware of the need to be screened after age 40. In order to increase screening participation, more effective strategies are needed for communicating the risk of PC to this population.

Given the previous, we have noted several limitations to this study: 1) When evaluating dietary behavior with respect to co-morbidity, it is essential to have clear outcomes (e.g., specific cancer type) as opposed to cancer in general. Although a significant portion of the men revealed that they had been treated for cancer in general, only two wrote specifically PC; 2) when collecting co-morbidity data as well as health practice behavior information, all sample participants should be used as opposed to a random sample.

Appendix 1

Table 1. Age, Physiological Measures for EFL, PC Study and PC Cases

Variable	EFL	n	PC Study	n	PC Cases (n=2)
Mean (SD)					
Age	43.0(13.9)	227	44.6(14.0)	59	62.0(11.3)
Systolic BP	134.1(19.7)	189	132.1(20.5)	54	118.5(26.2)
Diastolic BP	83.8(11.0)	189	83.9(11.8)	54	65.0(7.07)
Cholesterol	203.8(38.5)	178	204.6(38.9)	52	181.5(12.0)
BMI	29.2(6.09)	189	29.5(6.5)	54	28.8(2.06)

Table 2. Age, Physiological Measures by PC Screening Status (PC Study Participants)

	Screened for PC				
	Yes		No		Statistics
Mean (SD)	n		n		
Age	27	49.5(10.7)	30	37 (11.6)	T= 4.24**
Systolic BP	23	136.3 (17.2)	30	131.4 (19.1)	T= .965
Diastolic BP	23	83.6 (11.9)	30	84.5 (11.7)	T= -.271
Cholesterol	23	210.9 (40.3)	28	202 (41.3)	T= .777
BMI	23	32.2 (6.4)	30	28.4 (7.1)	T= .044*

* $p<.05$
** $p<.001$

Table 3. Dietary Profile (Data from CDC)

	Mean(SD)		
	EFL	PC Study	PC Case*
Alpha-tocopherol	1043.9(359.6)	1057.3(359.6)	1076
Gamma-tocopherol	251.7(103.2)	277.0(124.1)	293
Lutein & Zeaxanthin	25.0(10.6)	22.1(9.4)	23.0
Beta-Crypotoxanthin	10.7(7.7)	8.9(5.7)	10.0
Lycopene	20.7(10.1)	21.0(9.3)	26.0
Alpha-Carotene	5.0(9.0)	2.6(1.6)	4.0
Beta-Carotene	26.7(27.5)	19.2(17.5)	25.0
Vitamin A	63.7(15.7)	64.8(16.1)	60.0

*Dietary profile available for only one of the two PC Cases

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A Description of Prostate Cancer Screening Practices Among African American Men

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Abstract

This study examined prostate cancer (PC) screening practices and factors (age, BMI, socioeconomic status, and family history of PC cancer) that affect screening participation among African American (AA) churchgoers. The study occurred within the context of a larger study examining the effectiveness of a dietary behavioral change intervention among AAs in a major southeastern city. Of those men from which PC information had been collected, 67% (n=56) were original participants of the larger study. Significant differences in mean age [$t(55)= 4.23$, $p<.001$] and BMI [$t(50)=2.06$, $p<.05$] were found between those screened and not screened for PC. Men screened for PC were older and had a higher BMI than men not screened. Significant differences in proportions for the variables marital status [$\Pi 2= 7.73$, $p<.05$], education [$\Pi 2=6.64$, $p<.05$], and income [$\Pi 2=8.01$, $p<.05$] were observed for screening status. Fifty percent of the men in this sample reported they had been screened for PC.

Introduction

Adenocarcinoma of the prostate is one of the leading causes of death among men in the US. [1,2] It has been articulated as the second leading cause of cancer-related mortality, accounting for more than 20% of all cancers exhibited in men .[3] As a population, African Americans (AAs) tend to have the highest age-adjusted cancer morbidity and mortality rates than any other ethnic group in the United States and evince the highest rates of prostate cancer in the world [4]. African American men in the southeastern portion of the US are particularly at risk .[5-8] Moreover, AAs at the time of diagnosis tend to be younger and have a higher-stage disease. [9-11]

These excessive risks for AA males are independent of social class. [12] What is clear is that AA mortality from PC remains the highest of any population in the world. Incidence rates for AA men have increased steadily since the 1950s [13] AA men have an 85% greater chance of being diagnosed with PC and a 114% increased chance of dying from it when compared to white American men. [13, 14] As a result, the diagnosis of prostate cancer is of considerable importance among AA men. However, one concern is that AA men respond to PC screening from a different perspective than some ethnic groups. For example, Abbot et al, 1998[15] noted that AA men tend to acknowledge pain as the first symptom of possible problems with the prostate gland. Even when screening is free, AA men are less likely to participate in programs implemented at places of work. [16]

Based on the prevalence of PC, it has been suggested that screening for early detection is essential. The concern is that different methods result in different rates of identified hypoechoic lesions. [17, 18] In general terms, PC spreads locally and usually develops within the peripheral of the gland in a multicentric fashion. When prostate cancer is confined to the gland at the early stages of the disease (A1-2, B1-2), it can often be treated via surgery and/or radiation and have a five year survival rate of approximately

85% (REF). When the disease is not detected earlier, radiation therapy is normally delivered with a five year survival rate of approximately 50%.

Previously, the American Cancer Society suggested that individuals be screened for prostate cancer, via PSA and DRE, once annually especially upon reaching age 50. (REF). However, several studies support the notion that serum prostate specific antigen in screening efforts might need to start earlier for high-risk populations such as AAs. Given, the additional concern that later stage detection of PC among AA men presents, it may be wise to start screening earlier than the recommended age stated by the ACS.

The purpose of this study was to examine: at what rate do AA men who regularly attend church seek screening for PC; at what rate do AA men who regularly attend church receive treatment for PC after being screened; what are the demographic characteristics (age, BMI, socioeconomic status, and family history of PC cancer) of those men who have been screened for PC in comparison to those who have not been screened; and what is the perception of vulnerability to developing PC among men who have not been screened.

Methods

The study occurred within the context of a larger study examining the effectiveness of a dietary behavioral change intervention among AAs in a major Southeastern city. The study is a randomized cluster intervention effectiveness trial with one control and two experimental conditions. Participating churches were recruited through local community members and randomly assigned to one of three conditions. All churches were matched with respect to socioeconomic status (low, mixed, or high) and size. Four, five and four churches were assigned to conditions 1 through 3 respectively. All data for the baseline and one-year follow-up were obtained at health fairs conducted at each church. The study was powered to detect a difference between groups at a power of .80 and alpha of .05, with the church being the unit of analysis. To be eligible for this secondary analysis, participants

must be AA men, (including English-speaking Caribbean and African immigrants), a minimum of 36 years of age or older at time of baseline data collection and were willing to provide a mailing address and home telephone number. These criteria were confirmed during assessment procedures at the health screening.

Participants were recruited via church liaisons. Each liaison was asked to provide at least 60 names and telephone numbers of participants and to distribute questionnaires approximately three weeks before the health fair. In addition, ministers were asked to encourage congregates to attend the health fairs, flyers were posted and announcements were placed in church bulletins. Moreover, churches were provided with a $10.00 incentive for each participant that completed and participated in the screening.

For this substudy, five of the 13 churches were randomly selected to collect supplemental data regarding screening practices of men as it related to PC. Participants completed the paper-based questionnaire prior to their participation in a health fair conducted at their church. The questionnaire was comprised of ten items and queried participants on screening practices, perceived risk for PC, and knowledge of friends or family affected by PC. Respondents rated their likelihood for developing PC based upon a scale ranging from (1) not at all likely to (10) extremely likely.

Results

Sample Characteristics

Identification numbers were used to match participants of the PC screening study to the larger study's data set. Given that the analysis is based on data collected from a randomized cluster design, mean ages for respondents by participating church ranged from 35 to 50 years of age. Of those men from which PC information had been collected, 67% (n=56) were original participants of the larger study. The mean age of the sample was 44.6(14.0) years. Twenty percent (n=10) reported a yearly income of $19,000 or less, 34% (n=17) $20,000-39,999, 18% (n=9) $40,000-59,999 and 28% (n=14) indicated a yearly income of $60,000 or greater. Over sixty percent (66.1%, n=36) of respondents

were married. Approximately twenty percent (19.6%, n=11) were single and 14.3% (n=8) were divorced or separated. Eleven percent (11.35, n=6) did not complete high school compared to 42.2% (n=35) who graduated high school and 22.2% (n= 12) who completed college.

Fifty percent (50.6%) of respondents reported ever being screened for PC (Table 1). Of those screened for PC, 64.0%) indicated having a PSA compared to 51.3% that had a DRE conducted. Nearly thirty percent knew someone who had been diagnosed with PC.

Table 2 presents physiological measures obtained from the larger data set. Significant differences in mean age [$t(55)= 4.23$, $p<.001$] and BMI [$t(50)=2.06$, $p<.05$] were found between those screened and not screened for PC. Men screened for PC were older and had a higher BMI than men not screened. No significant differences were observed between participants' blood pressure (diastolic and systolic), total cholesterol and screening status.

Screening Status

Table 3 presents chi square analyses of sample characteristics and PC items by screening status. Significant differences in proportions for the variables marital status [$\Pi 2= 7.73$, $p<.05$], education [$\Pi 2=6.64$, $p<.05$], and income [$\Pi 2=8.01^*$, $p<.05$] were observed for screening status. A higher percentage (56.8%) of married respondents reported being screened for PC compared to single and divorced/separated men. Men of higher educational attainment (college graduates) were more likely to be screened for PC than male high school and non-high school graduates. In addition, those with higher household income were more likely to report being screened for PC than those in lower income categories. The lowest percentage (12.5) of those being screened for PC was among the lowest income category ($19, 999 or less a year).

Perceived Risk for PC

Perceived risk for PC was recoded in order to obtain high and low measures of perceived risk. Table 3 presents results of chi square analysis of perceived risk by demographic and PC information. Significant differences in proportions for marital status [$\Pi 2=10.57$, $p<.05$], family/friends diagnosed with PC [$\Pi 2=7.51$, $p<.05$] and family/friends treated with PC [$\Pi 2=11.84$, $p<.01$]. Three-fourths of married (75.8%), 100% of single, and 28.6% of divorced/separated respondents perceived their risk for PC to be low. A higher percentage (41.7%) of college graduates perceived their risk for PC to be high compared to high school graduates (22.6%) and non-high school graduates (25.0%). Ever being screened for PC was not significantly related to perceived risk for PC. Those who reported not knowing a friend/family diagnosed with PC were more likely (85.2%) than those that reported a family/friend to have been diagnosed with PC (55.0%) to perceive their risk for PC to be low. Similarly, a higher percentage (52.9%) of those knowing someone treated for PC had a higher perceived risk for PC compared to those (13.0%) not knowing someone treated for PC.

Discussion

Screening for PC continues to be an issue of concern for public health practitioners. On one side, no randomized clinical trials support the contention that early screening results in increased quality of life or survival.[19] However it is also well accepted that the detection of aggressive tumors at early stages can be treated successfully. [20] Because of the prevalence of PC and the severity (later stage of disease) at which it is diagnosed in AA men, an emphasis on early detection is paramount to reducing the burden of PC among this population. Church-based efforts appear to be an effective method for recruiting, educating and testing AA men for PC.[21]

Fifty percent of the men in this sample reported they had been screened for PC. The finding that married persons were more likely to be screened may be confounded by age. Married persons were significantly older and may have perceived a greater need to

be screened for PC due to their age. Differentials in the proportion of men screened across education and income categories were also observed. These findings suggest that greater attention should be directed towards educating and screening men of lower educational and income categories. In addition to increasing awareness about the disease, issues such as lack of access to screening as well as attitudes about PC, PC treatment and outcomes also need to be addressed. [21]

Although perceived risk for PC was not related to screening status, knowledge of friends or family diagnosed or treated with PC appears to increase screening participation. Personal knowledge of someone affected with PC may increase susceptibility to developing PC, thus prompting men to be screened for the disease. Given the mean age (44.6) of the sample and the percentage (50.5%) of men screened for PC, it appears that the majority of the men sampled were aware of the need to be screened after age 40. In order to increase screening participation, more effective strategies are needed for communicating the risk of PC to this population.

This study examined screening behavior among AA men. Sample size and insufficient measurement of PC information limit the findings presented here. Given a greater sample size, the former might reveal a significant relationship between perceived risk for PC and educational level. In regards to the latter, it would be important to determine what factors prompted participants to be screened for PC. Although screening status was related to income and knowledge of family or friends diagnosed with PC, further investigation of the contributors to screening participation among this population is warranted. It is not clear from the current study the extent income and education contribute to screening for PC among this sample. It would be of interest to determine whether the screening rates for this sample were affected by participation in the larger study. Although PC was not the specific focus of the parent study, participants may have gained a greater awareness of cancer preventive and early detection practices including those associated with PC.

Table 1. Prostate Cancer Screening and Diagnosis Items

Item	Yes n (%)	No n (%)
Have you ever been screened for PC	4(50.6)	40(49.4)
If yes, was blood taken (PSA)	32(64.0)	18(36.0)
If yes, was a digital exam given	20(51..3)	19(48.7)
Ever been treated for PC	4(5.1)	75(94.9)
Ever been diagnosed with prostate cancer	2(2.5)	78(97.5)
Anyone you know/known been diagnosed with PC	22(27.2)	59(72.8)
Anyone you know/known been treated for PC	16(23.2)	53(76.8)

Table 2. Age, Physiological Measures by Screening Status

			Screening Status			
	Overall		**Yes**		**No**	**Statistic**
Variable	Mean (SD)	N	Mean (SD)	N	Mean (SD)	
Age	44.6(14.0)	27	49.5(10.7)	30	37 (11.6)	T= 4.24**
Systolic BP	132.1(20.5)	23	136.3 (17.2)	30	131.4 (19.1)	T= .965
Diastolic BP	83.9(11.8)	23	83.6 (11.9)	30	84.5 (11.7)	T= -.271
Cholesterol	204.6(38.9)	23	210.9 (40.3)	28	202 (41.3)	T= .777
BMI	29.5(6.5)	23	32.2 (6.4)	30	28.4 (7.1)	T= .044*

*$p<.05$
**$p<.001$

Table 3. Selected Sample Characteristics by Screening Status and Perceived Risk

	Screening Status				Π2	P. Risk				Π2
	Yes		No			Low		High		
	%	N	%	N		%	N	%	N	
Variable										
Marital Status					9.63*					10.57*
Married	56.8	21	43.2	16		75.8	25	24.2	8	
Single	0.0	0	100	9		100.0	9	0.0	0	
Divor/Separated	37.5	3	62.5	8		28.6	2	71.4	5	
Income					8.01*					.970
$19,999 or less	12.5	1	87.5	7		87.5	7	12.5	1	
$20-39,999	35.7	5	64.3	9		69.2	9	30.8	3	
$40-59,999	75.0	6	25.0	2		75.0	6	25.0	2	
$60,000 or greater	58.8	10	41.2	7		71.4	10	28.6	4	
Education (completed)					6.64*					1.59
Less than high school	40.0	2	60.0	3		75.0	3	25.0	1	
High School	35.3	12	64.7	22		77.4	24	22.6	7	
College	76.9	10	23.1	3		19.4	7	41.7	5	
Screening Status										.915
Yes						45.6	26	58.8	10	
No						54.4	31	41.2	7	
Family/friends diagnosed w/ PC					2.04					7.51*
Yes	63.6	14	36.4	8		55.0	11	45.0	9	
No	45.8	27	54.2	32		85.2	46	14.8	8	
Family/friends treated for PC					6.41*					11.84**
Yes	75.0	15	28.0	5		47.1	8	52.9	9	
No	42.1	24	57.9	33		87.0	47	13.0	7	

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